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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,189	11/07/2005	Brian Edward Brooker	M02B148	3687
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The BOC Group, Inc. 575 MOUNTAIN AVENUE MURRAY HILL, NJ 07974-2082				
EXAMINER				
BEKKER, KELLY JO				
ART UNIT		PAPER NUMBER		
1781				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/525,189

Applicant(s)

BROOKER ET AL.

Examiner

KELLY BEKKER

Art Unit

1781

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-39 and 41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-39 and 41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI.08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Amendments made April 13, 2010 have been entered.
Claims 23-39 and 41 remain pending.

Claim Rejections - 35 USC § 112

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The 112 second paragraph rejection of claim 41 regarding the processing step "the dispersion" is being referred to has been withdrawn in light of applicant's amendments made April 13, 2010. The following 112 second paragraph rejection remains:

Claim 41 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 41 recites, "The method according to claim 23, wherein the dispersion is provided below ambient temperature for freezing". Additionally, the term "ambient temperature" is a relative term which renders the claim indefinite. The term "ambient temperature" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear if the ambient temperature is an unspecified freezing temperature, or a storage temperature, or some other bench mark temperature and as to what said temperature is. For example, it is unclear as to if the ambient temperature is 30C or 0C or some other temperature. While applicant provides an example of sub-ambient temperature, specification page 6, 10-15C, there is no guidance or definition in the disclosure for distinctly determining the temperature.

Response to 112 Arguments

Applicant's arguments filed April 13, 2010 have been fully considered but they are not persuasive.

Applicant argues that the term "ambient temperature" would be definite to one of ordinary skill in the art as the specification states "ambient temperature, or the temperature of the ice cream making process." This argument is not convincing as ambient temperature is not defined in the specification; the statement in the specification which applicant refers to can be interpreted as two separate temperatures, one temperature which is ambient temperature, and the second temperature which is the temperature of the ice cream making process. Furthermore, even if ambient temperature is the temperature of the ice cream making process, it is unclear as to what step the temperature would be applicable; for example, in an ice cream making process ingredients are mixed at 50-60C, cooled at 4C, and frozen at -30 to -40C (specification pages 1-2); if ambient temperature is the temperature of the ice cream making process it is unclear as to if ambient temperature would be from 60C to -40C or 50-60C or about 4C or about -30C to -40C.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 23-33, 37, 39, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delany (EP 0147483) in view of Brooker (US 2001/0038872 A1). The references and rejection are incorporated herein and as cited in the office action mailed January 19, 2010. Specifically regarding claim 41, as discussed above the claim limitations are unclear, however, as the claim recites providing the dispersion at below ambient temperature for freezing, as applicant gives an example of the subambient temperature as 10-15C (specification page 6), and as Delany, page 18 line 13 through page 19 line 6, teaches that the dispersion of fat and ice cream precursors are provided at 30-40F (which is -1.1C to 4.4C) before aging which is prior to aerating and freezing, it is believed that Delany teaches the dispersion as provided below ambient temperature as instantly claimed.

Claims 34-36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delany (EP 0147483) in view of Brooker (US 2001/0038872 A1), further in view of

Jonas (US 4012533). The references and rejection are incorporated herein and as cited in the office action mailed January 19, 2010.

Response to Prior Art Arguments

Applicant's arguments filed April 13, 2010 have been fully considered but they are not persuasive.

Applicant argues that Delany does not teach of a pre-crystallized fat particle as defined in the specification, wherein crystallization occurs prior to incorporating the fat into a dispersion of other ingredients. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. a definition of pre-crystallization which defines the step to which the crystallization is prior to) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The claims require that the fat be pre-crystallized for a blending step and prior to gasifying and freezing; there is nothing in the claims that requires the claims be pre-crystallized prior to the addition of specific ingredients, such as the emulsifier. In fact, it is noted that applicant claims mixing the fat with some other ingredients, such as an emulsifier, prior to pre-crystallization (claim 3) and the limitations which are instantly claimed, including the fat as pre-crystallized before being combined with the ice cream precursor phase have been addressed in the previous office action (specifically pages 3, 6, and 7) and herein.

Applicant argues that Delany teaches of homogenization and aging in the ice cream forming method, which are excluded from the instant claims and that there is no suggestion to remove such processing steps and to do so would destroy the reference as Delany teaches the steps are critical and would be hindsight reconstruction. Applicant further argues one would not have been motivated to combine the references because to combine Delany and Brooker teaches of eliminating the processing steps of Delany. Applicant's argument is not convincing as:

- It must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).
- The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).
- The test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).
- In the instant case, motivation is found in some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art and does not include knowledge gleaned only from the applicant's disclosure.
 - Delany teaches:
 - It is desirable for smaller fat crystals to be formed in the ice cream because they retain the product when the product is exposed to room temperature, thus obtaining products with less iciness, a smoother texture, better overrun better exposed to heat shock, and which has improved shelf life stability (page 7 lines 15-34, page 13 lines 12-22, and page 2 lines 14-24);

- The ice cream mixture is homogenized to reduce the size of the fat globules (page 9 lines 30-32);
- The ice cream mixture is aged for 2-12 hours to form crystallization of the fat (page 13 lines 12-22); and
- The fat emulsion diameter is 1.8-21 microns (page 10 all).
- Brooker teaches:
 - A method of forming food products which includes incorporating hydrogenated fat in the foods which has been cryogenically frozen to provide small crystals of liquid fat (paragraphs 0010, 0011, 0018, 0031, and 0032);
 - The food produced has a minimum crystal size, including a crystal size ideally less than 0.1 micron and that the final product with the fat crystals has an improved uniformity (paragraphs 0007, 0016, 0017, and 0022); and
 - The method saves time as no additional time is needed for crystallization to continue over an extended period of time, i.e. aging, (paragraphs 0008, 0020, and 0021).
 - It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the pre-crystallized particles of fat, which were pre-crystallized cryogenically in the ice cream taught by Delany in view of Brooker. One would have been motivated to do so because Delany teaches that it is desirable to have small crystallized particles of fat in the ice cream and because Brooker teaches of a method of forming a pre-crystallized fat with minimal crystallize size that adds improved uniformity in a final product and because the method of Brooker eliminates the need for aging and homogenization in

forming the reduced size fat crystals, thus saving money on processing time and equipment.

- Regarding the dispersion as gasified and frozen without being subject to homogenization, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the dispersion to be gasified and frozen without being subject to homogenization because:
 - Delany teaches that homogenization is used to form small fat globules of about 1.8-21 microns;
 - Delany teaches that smaller crystals form a better product because they retain when the product is exposed to room temperatures;
 - Brooker teaches that pre-crystalized particles of fat are formed without homogenization at a size of 0.1 microns;
 - It would be common sense to one of ordinary skill in the art that if a processing step could be removed and substantially the same or an improved product could be formed to remove the step would save money on processing time and equipment.
 - By using the small pre-crystallized fat particles as taught by Brooker in the ice cream as taught by Delany, the need for homogenization, i.e. for forming small

globules of fat, is removed, thus eliminating a processing step and saving on processing time or equipment. The exclusion of homogenization in the product processing of Delany in view of Brooker would not be destroying of the reference as the function of homogenization, i.e. forming reduced size fat globules, is still accomplished by the method of Brooker.

- Regarding the dispersion as gasified and frozen without being subject to aging, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the dispersion to be gasified and frozen without being subject to aging because:
 - Delany teaches that aging is utilized to form the small crystallized particles of fat;
 - Brooker teaches that pre-crystallized particles of fat are formed without homogenization at a size of 0.1 microns;
 - Brooker teaches a method of forming small crystallized particles of fat which saves time, and thus money, as no additional time is needed for crystallization to continue over an extended period of time, i.e. aging
 - It would be common sense to one of ordinary skill in the art that if a

processing step could be removed and substantially the same or an improved product could be formed to remove the step would save money on processing time and equipment.

- By using the pre-crystallized fat particles as taught by Brooker in the ice cream as taught by Delany, the need for aging, i.e. for forming crystallized globules of fat, is removed, thus eliminating a processing step and saving on processing time or equipment. The product processing of Delany in view of Brooker would not be destroying of the reference as the function of aging, i.e. forming crystallized fat globules, is still accomplished by the method of Brooker.
- Although Delany teaches that the steps of aging and homogenization are critical, Delany teaches the function of the steps is where the criticality lie and as Brooker teaches of different steps which perform the same function, the criticality of the process as taught by Delany is maintained in the combination of Delany in view of Brooker; i.e. applicant's argument is not convincing as Delany teaches that the criticality is improved stability achieved by selecting a specific oil, homogenizing the mix of ingredients to form an emulsion having a narrow distribution of small diameter fat globules, and aging the emulsion to crystallize the fat globules prior to whipping (abstract), and as the combination of Delany and Brooker maintains the critical function of selecting a specific oil and

forming small diameter fat globules which are crystallized prior to whipping.

Applicant argues that there is no motivation to precrystallize the fat prior to blending with the other ice cream ingredients. Applicant's arguments are not convincing. As stated in the previous office action and herein, it would have been obvious one of ordinary skill in the art at the time the invention was made to pre-crystallize the fat prior to blending it with the other ingredients, if the equipment to pre-crystallize the fat was contained in a different location from the other ice cream ingredients and the other ice cream processing equipment and it would have been obvious to one of ordinary skill in the art at the time the invention was made to mix and pre-homogenize the other ingredients since the pre-crystallized fat is able to form a homogenize product without being homogenized, as taught by Brooker. Furthermore, to switch the order of performing process steps, i.e. the order of the addition of the ingredients into the final mixture, would be obvious absent any clear and convincing evidence and/or arguments to the contrary (MPEP 2144.04 [R-1]). "Selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results". At the present time, applicant has not provided evidence of new or unexpected results due to the order of the processing steps. Applicant further argues criticality of the order of processing steps because Delany teaches critical steps. Applicant's argument is not convincing as, as discussed above, the criticality of the steps of Delany lie in the function and the combination of the references maintain the critical function. No criticality is shown in the references regarding the fat as pre-crystallized prior to or after blending with other ingredients.

Applicant argues that the method of Delany is critical and cannot be changed as Delany states on page 1 that it is extremely difficult to reformulate such aerated frozen products in an attempt to provide improvement. Applicant's argument is not convincing as 1) the process claims of Delany in view of Brooker would have been obvious and maintained any criticality as the functions of the process remain the same and as 2) the statement of Delany is referring to a formulation and not the method.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **KELLY BEKKER** whose telephone number is (571)272-2739. The examiner can normally be reached on **Monday through Friday 8am-4:30pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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